

**Climatological Data for December, 1910.**  
**DISTRICT No. 9, COLORADO VALLEY.**

FREDERICK H. BRANDENBURG, District Editor.

**GENERAL SUMMARY.**

The unusually mild weather that characterized the fall months continued without a break during the first and second decades, with two brief periods of precipitation that were confined to the northern half of the district. With the approach of the third decade a change to unsettled weather was general; temperatures were lower than the normal most of the time, precipitation became more frequent and widespread, but unfortunately insufficient in amount to bring the totals for the month up to the average, except in a few localities. Although a fair volume was reported in the upper Salt and upper Gila Rivers, water for irrigation was scarcely adequate to the needs, while in southwestern New Mexico the supply was decidedly short in all districts.

**TEMPERATURE.**

The mean of the 124 stations reporting was 37.6°, or 2.8° warmer than the normal and 10.8° warmer than December, 1909. By subdivisions, the means and departures were: Western Wyoming, 19.5°, +3.2°; western Colorado, 24.7°, +4.1°; eastern Utah, 31.1°, +3.6°; western New Mexico, 37.0°, +2.3°; Arizona, 47.6°, +2.2°; and southeastern Nevada, 41.2°. The highest monthly mean was 62.0° at Mohawk Summit, Ariz., and the lowest, 7.4°, at Dillon, Colo. During the first decade temperatures were continuously above the normal, except one day in the upper San Juan Valley. In the central part of the district the excess was marked. Mean temperatures above the normal persisted throughout the second decade, except near the Gulf of California. The last decade averaged colder than the normal throughout the district, although there were several warm days in the central portion. It was during this decade that the minimum temperatures of the month were generally recorded, and heavy to killing frosts occurred in the central and southern portions of Arizona. The highest temperatures of the month were generally within a few degrees of the highest of record for December, while the lowest were not near so low as are commonly noted in December. By subdivisions the extremes were: Western Wyoming, 45° and -11°; western Colorado, 60° and -27°; eastern Utah, 65° and -5°; western New Mexico, 76° and -28°; Arizona, 83° and -6°; and Nevada, 91° and 12°.

**PRECIPITATION.**

The average precipitation for 172 stations reporting was 0.75 inch, or 0.37 inch below the normal, and 0.73 inch less than for the corresponding month last year. A deficiency was noted on all drainage areas except the Grand. By watersheds, the means and departures were: Green, 0.98, -0.02; Grand, 1.49, +0.28; San Juan, 1.29, -0.37; Little Colorado, 0.53, -0.34; Gila, 0.27, -0.69; Mimbres, 0.10, -0.54; and Colorado proper, 0.66, -0.09 inch. The greatest monthly amount was 3.92 inches, at Corona, Colo., and none occurred at 1 station in Colorado, 6 stations in New Mexico, and 12 stations in Arizona, principally on the Gila watershed. The average number of days with 0.01 inch or more of precipitation was 4.

**MISCELLANEOUS.**

The percentage of sunshine was below the normal in western Colorado and central Arizona, while a marked excess was noted in the southwestern part of Arizona. Grand Junction reported 43, Durango 65, Flagstaff 80, Phoenix 75, and Yuma 89 per cent of the possible.

The mean relative humidity was 12 per cent above the normal at Phoenix, while somewhat less than the normal was noted elsewhere. The values reported were: Grand

Junction 75, Durango 69, Flagstaff 64, Phoenix 62, and Yuma 44 per cent.

Extracts from section snowfall bulletins:

*Western Wyoming.*—At the close of December there was less than the usual amount of snow in the region drained by the Green, and the present outlook for water the coming season is not encouraging.

*Western Colorado.*—The season's snowfall up to December 31 was much less than for the corresponding period last year, and, as a whole, considerably less than the normal. In a few localities on the different watersheds approximately the average amount was noted, but the areas so favored are too small to make up for the general and marked deficiency in the water stored for late irrigation. The snow is generally unpacked and there has been little drifting.

*Eastern Utah.*—The snowfall up to December 31 was below the average and much below the amounts reported a year ago. The outlook for water is poor.

*Western New Mexico.*—The snowfall during October, November, and December was much lighter than the normal and considerably less than for the corresponding period last year. The snow is not compact and is evenly distributed.

*Arizona.*—The snowfall of December was much below the normal. As compared with the close of December, 1909, the deficiencies in depth were: Salt and Verde watersheds, 13.5 inches; Gila watershed, 4.9 inches; Agua Fria and Hassayampa watersheds, 8.5 inches; and Little Colorado watershed, 38.9 inches.

**NEW SITE FOR THE COLORADO RIVER DAM.**

By L. N. JESUNOWSKY, Section Director.

Orders have been given by Mr. R. M. Teague, president of the Chuckawalla Development Company, for the inauguration of drilling operations on the Colorado River, at a point known as Box Canyon, near Bill Williams Fork, about 16 miles north of Parker, Ariz. A steam barge is now under course of construction and upon its completion the drilling apparatus lately received will be towed up the stream, and the little steamer will be put in commission for the transportation of material and supplies to the base of operations.

The drilling operations which have been in progress about 5 miles above Parker for the past few months are still being continued, but it is stated that this site will be abandoned, owing to the great depth to bedrock, which makes that point impracticable for the construction of a power dam. The company will endeavor to find a more suitable site up the river.

In connection with the abandonment of the old site, it is stated that a 10-foot diversion dam is planned by the Chuckawalla Company at Headgate Rock, the power dam to be built farther up the stream. If this report is correct, it goes to prove that the Chuckawalla Company plans to provide an irrigation system for the reservation. Heretofore the officials of the company disclaimed any intention to provide an irrigation project for these lands, basing their arguments and petitions to Congress on the privilege of building a dam on the Colorado solely for the purpose of conveying water into the Chuckawalla Valley, over 40 miles west of Parker. This latter project, it is now claimed, has been abandoned by the company, owing to its utter impracticability. What arguments will be advanced before the Congressional Committee on Rivers and Harbors for the construction of a dam near Bill Williams Fork are not known, but, from all appearances, it looks as if it will have to be admitted that it is solely for power purposes.

The Chuckawalla Company is contemplating the construction of a diversion dam in the event of the passage of the Warren bill, now before Congress. The cost of such a dam would not be so great as the one originally contemplated, and in the absence of any holdup in the way of water rights there is no doubt but what the citizens of Parker would approve this means of opening up the Parker Indian Reservation, with certain amendments to the Warren bill.